

July 31, 2017

Michael Wilhelm, Acting Division Chief Policy and Licensing Division Public Safety and Homeland Security Bureau Federal Communications Commission 445 12<sup>th</sup> Street, S.W. Washington, D.C. 20554

Re: PS Docket No. 07-114

Wireless E911 Location Accuracy Requirements

Indoor Location Accuracy Implementation Plan and Progress Report

Bristol Bay Cellular Partnership

Dear Mr. Wilhelm:

Pursuant to 47 C.F.R. § 20.18(i)(4)(i)-(ii), submitted herewith on behalf of Bristol Bay Cellular Partnership, a non-nationwide Commercial Mobile Radio Service provider, is the company's indoor location accuracy Implementation Plan and Progress Report.

Bristol Bay Cellular Partnership has a request for temporary waiver of the performance and reporting requirements of FCC Rule Section 20.18(i) pending before the Commission in PS Docket No. 07-114.

If questions arise, you are welcome to contact the undersigned.

Very truly yours,

Panele L. Dist

Pamela L. Gist



## Bristol Bay Cellular Partnership P.O. Box 456 Main Street, #1 King Salmon, Alaska 99613

E911 Location Accuracy Implementation Plan and Progress Report 47 C.F.R. § 20.18(i)(4)(i) and (ii)
PS Docket No. 07-114

Bristol Bay Cellular Partnership (Bristol Bay) is a non-nationwide provider of Commercial Mobile Radio Services (CMRS). Set forth below is Bristol Bay's progress toward meeting compliance deadlines prescribed by the Federal Communications Commission in *Wireless E911 Location Accuracy Requirements*, Fourth Report and Order, PS Docket No. 07-114, FCC 15-9 (released Fed. 3, 2015) (*Fourth Report and Order*), and codified in 47 CFR § 20.18(i), *et seq*. Also provided is Bristol Bay's Implementation Plan for meeting the Commission's indoor location accuracy requirements.

# **Progress Report**

Bristol Bay diligently maintains knowledge of the location accuracy rules and investigates technical requirements necessary to provide public safety with accurate location data for emergency callers. To date, however, no Public Safety Answering Point (PSAP) in Bristol Bay's service area has requested or become capable of receiving or utilizing indoor location data or Phase II Enhanced 911 (E911) location data.

Nevertheless, Bristol Bay has timely performed its *Fourth Report and Order* location accuracy reporting obligations:

#### January 30, 2017

The Non-Nationwide Carrier Live 911 Call Report was submitted to the FCC in PS Docket No. 07-114, providing aggregate live 911 call data covering reporting period October through December 2016. As a non-nationwide CMRS provider that does not provide coverage in any of the six Test Cities and that does not deliver Phase II location data to PSAPs, Bristol Bay's 911 live call data was collected and reported based on non-Phase II calls to 911. The report was sent to the National Emergency Number Association (NENA), the Association of Public-Safety Communications Officials (APCO) and the National Association of State 911 Administrators (NASNA).

## July 27, 2017

Bristol Bay's second Non-Nationwide Carrier Live 911 Call Report was submitted to the FCC in PS Docket No. 07-114, providing aggregate live non-Phase II 911 call data covering reporting period April through June 2017. The report was sent to NENA, APCO and NASNA.

Bristol Bay retains for two years all testing and live call data gathered for Non-Nationwide Carrier Live 911 Call Reports.

On March 1, 2017 Bristol Bay submitted to the Commission a request for waiver of 47 CFR § 20.18(i) "Indoor location accuracy for 911" rules and associated testing and reporting requirements because Bristol Bay's service area includes no PSAPs capable of receiving or using E911 or indoor location data. Bristol Bay explains that it is a small telecommunications carrier providing wireless services to a few hundred subscribers in rural Alaska. The company is managed and controlled by Bristol Bay Telephone Cooperative, owned by subscriber members. Based in King Salmon, Alaska, Bristol Bay serves a population of about 4,456 per 2010 Census. The wireless service area consists of small, isolated communities with few connecting roads.

PSAPs are designated by the Alaska Governor's Office. No official PSAPs have been designated in Bristol Bay's service area. In communities where no PSAP authority has been designated, 911 calls are routed to numbers provided by the Governor's Office. Some 911 calls are routed to Dillingham City or the Bristol Bay Borough Police Department, which have twenty-four hour answering capabilities.

In its waiver request Bristol Bay believes it demonstrates that the underlying purpose of 47 CFR § 20.18(i) is not served by requiring it to implement technical capability to supply E911 location information to public safety authorities that are incapable of receiving and processing the information. Likewise, in accordance with 47 CFR § 20.18(m)(1) Bristol Bay believes it is not required to support Phase II location under 47 CFR § 20.18(e)-(h) due to the lack of PSAP Phase II capability to receive the enhanced location information.

Regarding 47 CFR § 20.18(i)(2)(i)(B)(1), by April 3, 2017 Bristol Bay has not begun to provide dispatchable location or x/y location information within 50 meters for 40 percent of all wireless 911 calls. No PSAP in Bristol Bay's service area has requested or become capable of receiving and utilizing E911 call location data. Accordingly, by June 2, 2017 Bristol Bay did not submit to the FCC certification required by 47 CFR § 20.18(i)(2)(iii) that as of April 3, 2017 Bristol Bay provided service or report live call data in one or more of the Test Cities, was providing dispatchable location or x/y location information within 50 meters for 40 percent of all wireless 911 calls, had deployed the indoor location technology or technologies used in its networks consistently with the manner in which such technologies have been tested in the test bed, or had verified based on its own live call data that it was in compliance with the two-year benchmark set forth at 47 CFR § 20.18(i)(2)(i)(B)(1). Without a PSAP in its service area that has requested or become capable of receiving or utilizing 911 call location data, Bristol Bay is unable to fulfill the location accuracy requirements of 47 CFR § 20.18(i)(2)(i)(B)(1).

## Implementation Plan

Bristol Bay's compliance with FCC indoor location accuracy requirements of 47 CFR § 20.18, including subsections (i)(2)(i) and (i)(2)(ii), *i.e.*, horizontal and vertical location, will evolve according to the capabilities and advancements of PSAPS and critical vendors.

Local public safety officials will follow their own path to secure funding and upgrade technical capabilities for Phase II E911 services. When a PSAP becomes capable of receiving, processing and utilizing location data, Bristol Bay will implement a solution for delivery. Bristol Bay is prepared to begin providing Phase II and indoor location information required under 47 CFR §§ 20.18(e)-(i) within six months of receipt of a request from a PSAP for Phase II location data, per 47 CFR § 20.18(f), (g)(2).

Bristol Bay has solicited from 911 technical experts proposals for development of plans to implement E911 location services. The projected cost of developing a plan is about \$40,000. A system likely can be designed in about eight weeks. Following the design process, Bristol Bay will install the E911 call location system, then test and deploy with the requesting PSAP. Bristol Bay expects to spend about \$60,000 for set-up and \$130 per month per tower, plus costs for trunks, testing and maintenance. To comply with FCC reporting rules, Bristol Bay will need to purchase Location Performance Management tools at a cost of about \$1,500 for set-up, \$150 per tower and \$11 per tower per month (for 36 months).

Participation by state and local authorities is essential for Bristol Bay to perform its role in facilitating E911 location services. When E911 systems are activated, Bristol Bay will work to incorporate technological advancements to deliver accurate and useful location information to emergency dispatch personnel. Bristol Bay remains mindful of FCC Rules' schedule of requirements:

#### 2018

February 1 - submit live 911 call location data report to FCC, NENA, APCO and NASNA

April 3 - deliver to PSAPs either "dispatchable location" or "x/y location within 50 meters," for 50 percent of 911 calls

April 3 - provide with wireless 911 calls that have a dispatchable location, upon the request of a PSAP, x- and y-axis (latitude, longitude) confidence and uncertainty information (C/U data) on a per-call basis, specifying the caller's location and the radius in meters from the reported position with a uniform confidence level of 90 percent, per 47 CFR § 20.18(j)(2). Collect and retain the data for two years, and make the data available to PSAPs upon request, per 47 CFR § 20.18(k).

June 2 - submit 911 location accuracy certification to FCC

August 3 - deliver to PSAPs uncompensated barometric data from any handset that has the capability to deliver barometric sensor data

August 1 - submit live 911 call location data report to FCC, NENA, APCO and NASNA

August 3 - submit implementation plan and progress report to FCC

October 2 - submit 911 location accuracy certification to FCC

## <u>2019</u>

February 1 - submit live 911 call location data report to FCC, NENA, APCO and NASNA

August 1 - submit live 911 call location data report to FCC, NENA, APCO and NASNA

## <u>2020</u>

February 1 - submit live 911 call location data report to FCC, NENA, APCO and NASNA

April 3 - provide to PSAPs either "dispatchable location" or "x/y location within 50 meters," for 70 percent of 911 calls, or extend the deadline based on the timing of Voice over LTE (VoLTE) deployment in the provider's network.

June 2 - submit 911 location accuracy certification with FCC

August 1 - submit live 911 call location data report to FCC, NENA, APCO and NASNA

#### 2021

February 1 - submit live 911 call location data report to FCC, NENA, APCO and NASNA

April 3 - provide to PSAPs either "dispatchable location" or "x/y location within 50 meters," for 80 percent of 911 calls, or extend the deadline based on the timing of VoLTE deployment in the provider's network.

April 3 - provide with wireless 911 calls that have a dispatchable location, upon the request of a PSAP, x- and y-axis (latitude, longitude) confidence and uncertainty information (C/U data) on a per-call basis, specifying the caller's location and the radius in meters from the reported position with a uniform confidence level of 90 percent, per 47 CFR § 20.18(j)(3). Collect and retain the data for two years, and make the data available to PSAPs upon request, per 47 CFR § 20.18(k).

June 2 - submit 911 location accuracy certification to FCC

August 1 - submit live 911 call location data report to FCC, NENA, APCO and NASNA

### **2022**

February 1 - submit live 911 call location data report to FCC, NENA, APCO and NASNA

April 3 - If service is provided to any portion of the top 25 Cellular Market Areas (CMAs), deploy in that area either (1) dispatchable location, or (2) z-axis technology that achieves the Commission-approved z-axis metric:

- Where "dispatchable location" is used, populate the National Emergency Address Database (NEAD) with a total number of dispatchable location reference points in the CMA equal to 25 percent of the CMA population.
- Where z-axis technology is used, deploy z-axis technology to cover 80 percent of the CMA population.

June 2 - submit 911 location accuracy certification to FCC

August 1 - submit live 911 call location data report to FCC, NENA, APCO and NASNA

#### 2023

February 1 - submit live 911 call location data report to FCC, NENA, APCO and NASNA

August 1 - submit live 911 call location data report to FCC, NENA, APCO and NASNA

#### 2024

February 1 - submit live 911 call location data report to FCC, NENA, APCO and NASNA

April 3 - If service is provided to any portion of the top 50 CMAs, deploy in that area dispatchable location, or deploy z-axis technology in compliance with any accuracy metric that has been approved by the Commission.

June 2 - submit 911 location accuracy certification to FCC

August 1 - submit live 911 call location data report to FCC, NENA, APCO and NASNA

#### 2025

February 1 - submit live 911 call location data report to FCC, NENA, APCO and NASNA

August 1 - submit live 911 call location data report to FCC, NENA, APCO and NASNA

Accordingly, Bristol Bay will seek to achieve location accuracy progress as PSAP and industry technology permits to enhance the safety of emergency callers in its service area.

If the Commission requires additional information, Bristol Bay Cellular Partnership will be pleased to provide it upon request.

effrey Fulton

General Manager and Chief Executive Officer

Date:

July 31, 2017

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